UNWRAPED

Exposing India's Top Plastic Polluters



#break**free**fromplastic



ACKNOWLEDGEWENTS

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The methodology of brand audits is based on the foundational work of Break Free From Plastic core members – Mother Earth Foundation, GAIA Asia Pacific, Greenpeace and Citizen Consumer and Civic Action Group (CAG). We are grateful to the members of the Break Free From Plastic movement for their support of brand audits and continued work in exposing top plastic polluters, and to Sybil Bullock (Global Brand Audit Coordinator) and Satyarupa Shekhar (Asia Pacific Coordinator) who have helped bring this report together.

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Finally, we would like to acknowledge the hard work and invaluable contribution of the country's informal waste pickers, who have disproportionately shouldered the growing burden of plastic waste management. We join them in demanding corporate accountability for the plastic waste crisis.



EXECUTIVE SUMMARY

In 2021, more than 1,000 volunteers in 19 states across India conducted brand audits to hold corporate polluters accountable for their indiscriminate use of single-use plastic packaging. A brand audit is an initiative that involves counting and documenting the brands found on plastic waste to identify the companies responsible for plastic pollution. Brand audits are conducted annually by members of the 'Break Free From Plastic' movement across the globe. This year, groups from India audited a total of 1,49,985 pieces of plastic, of which 70% were marked with a clear consumer brand.

The Top 10 international companies polluting India with plastic were:

















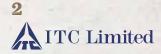




Unsurprisingly, Coca-Cola, Pepsi and Unilever are also the global top plastic polluters for 2021. In fact, 8 of the top 10 brands polluting India have consistently featured in the Top 10 global plastic polluters list over the past four years.

The Top 10 Indian brands found in the plastic waste were:





















The top international brands contributed to more waste than the top Indian brands. Further, only brands which featured in more than 2 states were considered for the national polluter list, to avoid over-representing local brands.

Multi-layered plastics (which are non-recyclable at a commercial scale) made up 35% of all plastic waste, and 40% of all branded plastic waste. These sachets are composed of several different plastic types, and often other materials like metal and paper, making them technically challenging to separate for recycling. Their small sizes, light weight and high volume make them logistically challenging to pick, sort, aggregate, and transport. Yet, companies continue to rely on this unsustainable throw-away packaging.

The dominant narrative on plastic pollution has been crafted by plastic producers to focus on consumer behaviour, littering, and waste management. Meanwhile, these companies have continued to pump more plastics, and increasingly low-value difficult to recycle plastics into our communities. Through brand audits, we hope to correct the narrative and shift focus back onto the producers. The problem with single-use plastics begins with oil extraction and extends to the chronic externalisation of life-cycle costs by producers.

The national policy focus on plastic waste management provides an opportunity to meaningfully tackle the plastic pollution crisis, but comes with two major risks: legitimising false solutions to plastic pollution, and displacement of informal waste pickers and the recycling sector.

End-of-life processing like incineration, and waste-to-energy, and unproven technologies like chemical recycling are not a solution to non-recyclable plastics, and should not function as a means to justify their continued production. Plastics that cannot be recycled or reused should not be produced. Legislation should mandate the phase out of non-recyclable plastics, mandate the use of more recycled plastics in single-layered products, and incentivise companies to switch to reuse or refill delivery systems.

For years, the informal recycling sector in India has internalised the cost of plastic waste management that should have been borne by the producers. Now, with the anticipated Extended Producer Responsibility (EPR) mandate, there is a risk that companies will set up parallel, centralised, private recycling systems that will displace informal sector workers. EPR systems should be designed in consultation with informal sector waste pickers, and investment should be channelled towards capacity building and formalisation, and supporting materials that are currently unviable for recycling.

Strong government mandates for the integration of the informal sector, the phase out of non-recyclable plastics, and a permanent reduction in the production of single-use plastics will set the roadmap for India to control the plastic pollution crisis.

CONTENTS

Introduction	6
Brand Audits	7
Plastics in Indian Policy	7
Methods and Limitations	10
Results	11
Brand Audit Events	15
Appeal to Producers: Reveal, Reduce, Redesign	22
Multi-Layered Plastics and The Greenwashing of False Solutions	24
Recognising Waste Pickers	26
Conclusion and Recommendations	28

INTRODUCTION



Brand Audit, Pune Image: SWaCH, Pune

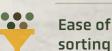
Brand audits are data-driven, citizenled initiatives in which plastic waste is documented to identify the companies responsible for plastic pollution. These audits are conducted annually across the world by members of the Break Free From Plastic (BFFP) movement. The Break Free From Plastic movement was launched in 2016 to demand systemic change and lasting solutions to the plastic waste crisis. This means tackling plastic pollution across the entire value chain – from the extraction of fossil fuels to the disposal of plastics. Brand Audits are an important tool in this fight.

For decades, plastic producers have controlled the narrative on plastic pollution, framing it as a consumer-created issue of improper handling and disposal. In reality, fast-moving consumer goods companies rely on cheap, low-quality plastics to deliver their products to consumers, and crucially, their business models hinge on externalising the cost of collection and disposal of these plastics. The economic and environmental costs are effectively pushed onto informal waste pickers,

governments and citizens. In India, informal sector waste pickers, traders, and aggregators have worked efficiently for decades, contributing to a recycling rate of 60% for plastics, far higher than the global average of 20%. Yet more than 9,400 metric tonnes of plastic in India ends up in landfills or as pollution every day.

There are several reasons why all plastics are not recycled. First, several commonly occurring plastic items are currently non-recyclable at scale. Multi-layered plastics (composed of several different layers and types of plastic, paper and metal), are the most abundant type of plastic waste, but due to their heterogenous nature, are technologically challenging to recycle, and till today, remain non-recyclable at scale. Other types of plastics, particularly plastic bags and smaller pieces of plastic are typically of such low quality that they are not able to generate enough





Ease of



Ease of storage & transportation



Value fetched after recycling economic value to justify the costs of recycling. The only reason these plastics continue to be produced is because it is profitable for fast moving consumer goods companies to use cheap, low-quality plastics and externalise the costs of waste management. Real solutions to the plastic waste crisis need to come from the producers of these plastics. Brand audits enable us to identify and shift the focus back on the companies who profit from plastic pollution, and demand that they stop producing unnecessary single-use plastics.



Illustration of multi-layered plastic (MLP) Image: CAG, Chennai

Brand Audits

Coca–Cola and PepsiCo have been the top 2 global polluters every year since #breakfreefromplastic's first brand audit in 2018. In 2021, Unilever rose to 3rd place, its highest ranking in global brand audits so far. Of the top 10 global polluters of each year, 8 have been consistent across all years: Coca–Cola, PepsiCo, Nestlé, Unilever, Mondelez International, Mars, Inc., Procter & Gamble, and Colgate–Palmolive. Each year, the plastic type "Other", marked with '7' inside the chasing arrows, has been the most commonly occurring type of plastic, accounting for anywhere between 40–60% of all plastic waste. This includes multi–layered sachets, cigarette butts, tubes used for personal care products like toothpaste, and other non–recyclable plastics. In India too, multi–layered plastics have accounted for roughly 60% of all plastic waste in previous audits. Despite the efficiency and resilience of informal waste pickers and the recycling sector, non–recyclable plastics will continue to pose a serious environmental threat unless producers commit to eliminating them.

Plastics in India

This report comes at a critical moment in Indian policy on plastic waste management. Since the launch of the Swachh Bharat Mission, there has been a national focus on improving all aspects of solid waste management, and building pressure to address plastic waste management, specifically. Keeping with this momentum, the Plastic Waste Management Rules, 2016, mandated that plastic producers, importers and brand owners would be required to work out modalities for plastic waste management under Extended Producer Responsibility (EPR) principles. Promisingly, the Rules mandated that the manufacture and use of non-recyclable multi-layered plastic should be phased out within a two-year period. At the time, this was a huge win in the fight against plastic pollution, and

several state governments built on this momentum with single use plastic bans. Come July 2022, a ban on some single-use plastics will be in effect across the country.

Since then, progress towards lasting solutions has been somewhat limited. A major setback was the reversal of the order to phase-out non-recyclable plastics. The phrase non-recyclable was replaced with 'plastic which is non-recyclable or non-energy recoverable with no alternate use'. This change not only gives producers a license to continue plastic production, but effectively legitimises technologies such as incineration, gasification, chemical recycling, and others, whose technical effectiveness and impact on the environment is still unknown. This shifts the focus onto waste management, and conceals the real problem of overdependence on non-recyclable plastic.

Plastic policy
comes with two
major risks:
Legitimising
false solutions,
and Displacing
informal waste
pickers and the
recycling sector

In October 2020, the Union Ministry of Environment, Forest and Climate Change published a <u>draft</u> notification for regulations on Extended Producer Responsibility. The notification outlines targets for recycling, targets for using recycled plastics and encourages reuse. However, there are two major concerns with the draft EPR regulation.

The notification does not make a single mention of waste pickers or the informal recycling sector. Worse still, the recommended plastic collection mechanism is for producers to establish collection points or Material Recovery Facilities – implying that new systems should be set up, rather than channelling waste through the existing recycling sector. There is a real danger that EPR will channel materials away from the informal sector and into a new, private sector, destroying the livelihoods of millions.

On the subject of non-recyclable plastics (multi-material and multi-layered plastics), the draft regulations allow end-of-life processes like waste-to-energy, co-processing, and plastic-to-road; and the continued production of these plastics. This falls short of tackling the issue of overproduction of plastic, and legitimizes processes which have negative environmental outcomes on their own.

There is a clear intent from the government to tackle plastic waste, yet so far, the narrative has been shaped more strongly by corporate interests than by the voices and experiences of the individuals and groups who have been cleaning up their waste for decades. With data from the brand audits, and experiences of the informal sector in waste management, we hope to correct the narrative and propose real, lasting solutions to the plastic waste crisis.

KNOW YOUR PLASTICS















How are plastics recycled?

Widely recycled plastics like PET and HDPE can be recycled back into the same products a few times before they are downcycled and eventually, end up as pollution. Downcycling is converting waste into lower quality products, which often cannot be recycled.

LDPE and PP are typically used as food packaging, and are often contaminated with wet waste when discarded. This makes them challenging to sort, store and clean and can cause these recyclable plastics to be rejected from the recycling stream.

"Other" plastics (0) are light-weight, low quality, and composed of multiple layers (including other materials like paper and metal). This makes recycling them technologically challenging and economically unviable.



METHODS

The method for conducting a brand audit was developed by members of Break Free From Plastic movement in 2017. A toolkit is publicly available on the BFFP website. Brand audits are conducted by volunteers and members of BFFP all over the globe – with 575 audits across 55 countries in 2020. This year, 7 groups in India conducted brand audits across 19 states, auditing a total of 1,49,985 pieces of plastic.



Brand Audit, Kormangala Image: Bianca Fernandes

There are broadly two types of brand audits, based on the source of plastic waste — home audits and clean—ups. Home audits reflect the composition of household plastic waste generation, and clean—ups of waste in public spaces reflect the composition of plastic waste that has ended up as pollution. Once the plastic waste is collected, data on each piece of plastic is recorded. This includes the brand name, parent company, product type, plastic resin type and whether it is a single or multi-layered plastic.

For the data analysis, only brands appearing in more than two states were considered for the national aggregated list, to avoid over-representation of local producers. This aligns with the <u>Central Pollution Control Board's criteria for national registration under EPR</u>.

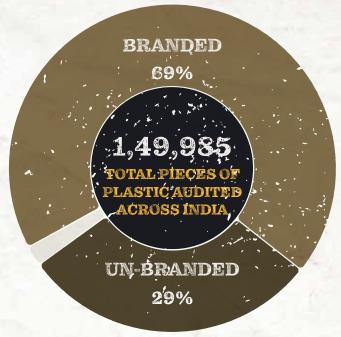
LIMITATIONS



Recording Data, Brand Audit, Pune Image: SWaCH, Pune

The brand audits conducted in India cannot claim to be wholly representative of India's plastic waste. The diversity in language, brand and parent company names make it challenging to have an exhaustive database linking each brand to a parent company, so some linkages may be missed. It is possible that small plastic producers (especially local producers) may be overrepresented, while large plastic producers may be underrepresented relative to their contribution to plastic waste in India. Taken together, however, the aggregate results will reveal important commonalities and differences in plastic waste across India, particularly about the overwhelming presence of international brands.

RESULTS



This year, a total of 1,49,985 pieces of plastic waste were audited across India, of which 98% had sufficient data for analysis. Of these, 70% had a clear consumer brand and 30% were unbranded.

Over 60% of all plastic items found were used for food packaging, of which nearly 25% were from milk packets alone.



Top 10 International Polluters



Unilever, PepsiCo, and Coca-Cola were the Top 3 International plastic polluters. PepsiCo and Coca-Cola have placed in Break Free From Plastic's Top 3 Global Polluters list since the first brand audit. In fact, 7 of the Top 10 International brands polluting India have consistently featured in the Top 10 over the past 3 years. It is telling that despite immensely well-marketed sustainability commitments and initiatives, it is largely the same handful of companies that continue to contribute to the bulk of plastic waste across the globe.

Top 10 Indian Polluters



The Top 3 Indian plastic polluters were Parle Products Private Limited, ITC Limited, and Haldiram's. It is interesting to note that the top 10 Indian polluters made up roughly 10% of the plastic waste, the top 10 international polluters made up 15% of plastic waste.



Multi-layered plastics, which are currently non-recyclable at a commercial scale, made up 35% of all plastic waste, and 40% of all branded plastic waste. Since this material poses a major challenge, it is important to investigate the brands that rely on this material to sell their products. Unilever (Hindustan Unilever in India) has announced that it will achieve 100% 'plastic neutrality' in India this year. What this means is that Unilever will continue to produce multi-layered plastics, so long as they are able to pay for the management of more than what they produce. So, Unilever will be able to not just sustain but increase its production of multi-layered plastics as long as they support the processing of an equivalent amount of plastic. Is this really a solution?

The reality is that the majority of multi-layered plastics that are collected under such extended producer responsibility and sustainability commitments today, are sent to cement kilns for incineration, or to some form of waste-to-energy or pyrolysis plants, not for recycling. While there are some initiatives attempting to recycle or upcycle multi-layered plastics, they remain at the pilot phase and are yet unproven at a commercial scale. Since this plastic currently cannot be mechanically recycled at scale, or processed without leading to further pollution, plastic neutrality will only serve as a license to continue production of an unsustainable material. The need of the hour is for companies to invest in refill and reuse systems to reduce the dependency on single-use plastics and redesign packaging to eliminate multi-layered plastics entirely.

BRAND AUDIT EVENTS

Citizen Consumer and Civic Action Group (CAG) is a 35-year-old Chennai-based non-profit, and non-political organisation that works towards protecting citizens' rights in consumer, civic and environmental issues and promoting good governance processes including transparency, accountability and participatory decision-making. CAG's focus has been to promote decentralised, sustainable, healthy and inclusive solid waste management practices in Tamil Nadu through data-driven advocacy and public participation.



Home Brand Audit, Chennai Image: CAG, Chennai

CAG's Brand Audit event was a state-wide home audit with 203 participants from different parts of Tamil Nadu collecting 5,759 pieces of plastic waste. The data showed that unbranded, local products were the largest contributor to plastic waste at 25% followed by Unilever at 8%. More than two-thirds (67%) of the plastic were a mix of Number 7 and plastic packaging with no labelling. Plastics from food packaging (62%) was the most common product type. Unfortunately, nearly 40% of the plastics were multi-layer and only 31% of plastics collected are locally recyclable.

Though all volunteers were aware of the plastic crisis in general, there was less awareness about plastic types and recyclability. CAG calls for stronger enforcement of the single use plastic ban in Tamil Nadu, clearer messaging on plastic waste, and for making sustainable alternatives to plastic.



TAMIL NADU

203

5,759

VOLUNTEERS

PLASTIC ITEMS
AUDITED





TOP POLLUTER MOST COMMON PLASTIC TYPE

66

I know plastic is a problem. We see advertisements and messages but I didn't really think about it. The audit made me realise how huge the problem is and that we all have a role to play in solving this problem.

99

Saasthika College Student

Hasiru Dala (Green Workforce in Kannada) is a non-profit, social impact organisation that creates social change by institutionalising the informal sector waste-workers to enable an improvement in their basic rights, recognition and provide stable livelihoods and environmental change through sustainable waste practices. management organisation focuses on securing justice for waste pickers through interventions co-created with waste pickers, in the areas of identity rights, access to family education, healthcare, housing, pension, skill development, market and employment access, and multi-tier policy advocacy.

Hasiru Dala's brand audit was conducted in 4 different locations in Karnataka with the help of 287 volunteers: Bengaluru, Bettahalasur, Bengaluru Urban District, Coorg and Mysore. In Bengaluru, the audit was conducted for 8 apartments and 6 Dry Waste Collection Centres in JP Nagar, Sarjapura, Gottigere, Domlur, Koramangala, and Marapanpallya. In Bettahalsoor, a town in Bengaluru Urban District, the audit was conducted at the Dry Waste Collection Centre that services 8 villages, auditing over 800 pieces of plastic. The Mysore Audit took place at the Zero Waste Ward, over 400 pieces of plastic were audited. In Coorg, we had the 26 Gram Panchauats participate, totalling over 400 pieces of plastic. Milk packets (LDPE) were the most common type of plastic waste found.



KARNATAKA

287

1,24,390

VOLUNTEERS

PLASTIC ITEMS
AUDITED



Karnataka Co-operative Milk Producer's Federation Ltd (KMF)

> TOP POLLUTER



MOST COMMON PLASTIC TYPE



Brand Audit, Kodagu (Coorg), Karnataka Image: Hasiru Dala

Paryavaran Mitra is a non-profit entity based in Ahmedabad for social and environmental issues. The organisation has established its name in the field of environment and governance. It promotes sustainable development through participation in environmental governance at the local, regional and national levels. Paryavaran Mitra also gets involved in policy interventions, with a focus on public interest litigation.

Paryavaran Mitra's brand audit was conducted in August 2021 with the help of 74 volunteers. The audit was conducted across 34 different cities of India spread across 9 states. The audit was conducted in virtual mode with participants collecting plastic waste at their homes, societies and work-places. A total of 1,757 units of plastic waste was collected, with Amul emerging at the top brand in plastic waste.



UTTARAKHAND,
UTTARAKHAND,
UTTAR PRADESH,
RAJASTHAN,
GUJARAT,
MAHARASTRA,
KARNATAKA,
KERALA,
WEST BENGAL

74

1,757

VOLUNTEERS

PLASTIC ITEMS
AUDITED





TOP POLLUTER

MOST COMMON PLASTIC TYPE

SWaCH Pune is India's first wholly owned waste picker cooperative, with a current membership of 3,540 waste pickers, working in partnership with the Pune Municipal Corporation for doorstep collection of waste. SWaCH aims to engage an entrepreneurial workforce of waste pickers into an efficient, responsive and accountable organisation and work in partnership with the municipal system to transform solid waste management in Pune.

This year, SWaCH conducted brand audits in four areas of Pune city. In Yerwada, Swargate and Hadapsar, litter waste was audited; and in Baner, household waste was audited. Over 9,500 pieces of plastic were audited with the help of 65 volunteers. Chitale, Parle, Britannia, Amuland Sumeru were the top 5 Indian plastic polluters. Unilever, Mondelez International, Nestle, PepsiCo, and Procter & Gamble were the top 5 International polluters.

Multi-layered plastics were the most abundant, making up 55% of all plastic waste. Parle, Unilever and Britannia were the top 3 multi-layered plastic polluters. SWaCH waste pickers have worked with ITC Limited since 2019 to pick up multi-layered plastics, and demonstrate the potential for inclusive EPR. SWaCH urges more producers to step forward and work with waste pickers to address the plastic waste crisis.

The waste pickers of SWaCH appeal to producers to consider the life-cycle costs of their products. If packaging is non-recyclable, or too small to pick up, or has too little value it will not be recycled. If packaging cannot be recycled, reused or composted it should not be produced.



MAHARASTRA

65

9,533

VOLUNTEERS

PLASTIC ITEMS AUDITED





TOP POLLUTER MOST COMMON PLASTIC TYPE

66

What do we do with these small (multi-layered) sachets? They cannot be composted. They have no value so we cannot sell them for recycling. They are so small that we can't even pick them up. We urge companies to produce packaging which we can pick up and send for recycling, or which can be composted.

99

Asha Kamble
Waste Picker,
Member of SWaCH Cooperative



Zero Waste Himalaya (ZWH) is a pan-Himalayan platform of individuals and organisations promoting zero waste principles and practices across the Himalaya. ZWH has been advocating for systemic changes and challenging the existing system of rolling down the hill or burning of waste. We partner with Integrated Mountain Initiative, Swachh Bharat Missions, ULBs, PRI, Educational, Community and Faith Based Institutions to promote zero waste.

The Himalayan Clean-up from Home 2021 was undertaken in May and June across the Indian Himalayan Region. With 381 registrations, 199 households' data was processed from across 11 states. The home audit analysed 7888 pieces with 85% being plastic and 71.8% non-recyclable, mostly multi-layered plastic. 65.57% of this was food packaging. The top three polluters were Hindustan Unilever, Nestle, and PepsiCo.

Zero Waste Himalava demands that companies take responsibility for retrieving and designing out the waste from their products that is being dumped in the Indian Himalayan Region. ZWH calls on the national government to recognise the geographical challenges, ecological fragility and higher operational costs of the Himalaya through legislation on waste management. ZWH also urges regional governments to strengthen single use plastic bans, and work towards real and sustainable solutions.



LADAKH, JAMMU & KASHMIR, HIMACHAL PRADESH, SIKKIM, WEST BENGAL, ASSAM, MEGHALAYA, TRIPURA, MIZORAM, MANIPUR, NAGALAND, ARINACHAL PRADESH

381

7,888

VOLUNTEERS

PLASTIC ITEMS AUDITED



Unilower

TOP POLLUTER



MOST COMMON **PLASTIC TYPE**



Brand Audit, Darjeeling, West Bengal Image: Noel Giri, Zero Waste Himalaya

Nature's buddy is a community-based organisation that envisions the protection, development of socio-economic and environmental changes in the region of Uttarakhand. The three R's: reduce, reuse and recycle are the main mantras of the team.

Nature's buddy conducted the brand audit from 21st August to 5th September, 2021 at the Song River, flowing between the Reniwala, kheri and Maaldevta villages. A total of 18 volunteers collected 496 pieces of plastic from the riverside. The top polluters for this region were Haldiram's, Coca-Cola and Bisleri. 65% of the plastic waste was multi-layered plastic. Over the past 2 years, Nature's buddy has appealed to brands owners in the region to switch to non-plastic packaging, to no avail.



UTTARAKHAND

18 VOLUNTEERS 496
PLASTIC ITEMS
AUDITED





TOP POLLUTER MOST COMMON PLASTIC TYPE

Katie Conlon, Ph.D. organised a brand audit at Kappil Beach in Kerala in August 2021 with the support of 12 Community volunteers through Shiva Rishi Yoga School. The group collected 1144 pieces of waste (total weight 31.35kg, and overwhelmingly plastic). The audit revealed 163 pieces of branded plastic, representing 88 different brands. PepsiCo emerged as the top polluter.

As South Kerala is comprised of fishing communities, and also dependent on beach tourism, it is crucial to stop this waste before it reaches the sea. Fishermen in the area have reported spending hours cleaning their nets of plastic; moreover, the ongoing coronavirus situation has created waste collection irregularities that exacerbate an already challenging waste situation.



KERALA

10 VOLUNTEERS

163
PLASTIC ITEMS
AUDITED





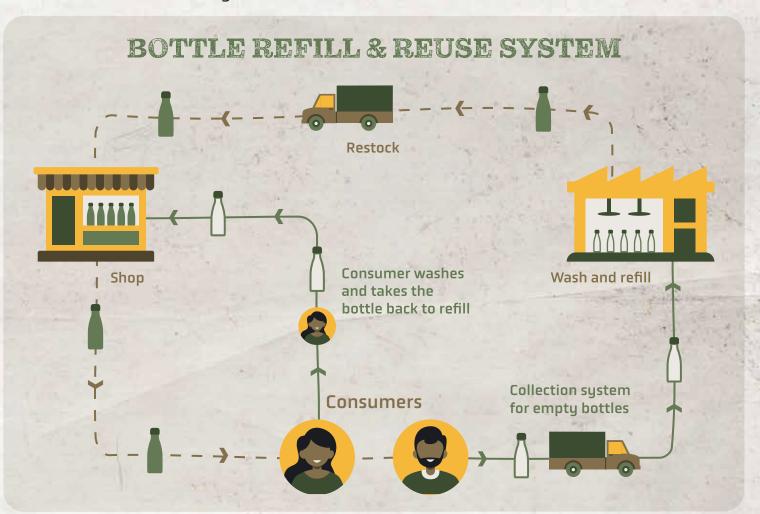
TOP POLLUTER MOST COMMON PLASTIC TYPE



Break Free From Plastic calls on plastic producers to reveal how much singleuse plastic they produce, set clear and measurable targets for reducing the production and use of plastics, and redesign packaging and delivery to eliminate single-use plastics.

Producers, importers and brand owners introducing plastics into the system should reveal how many single-use plastic items they produce — both by count and weight. It is important to reduce the absolute number of single use plastics, and not just the overall weight of these plastics because one way for companies to reduce plastic production by weight, is to double down on their single-use plastic dependency by using plastics which are light-weight, cheaper, lower in quality and harder to recycle. This will serve to reduce the weight of plastic they introduce, but will compound the plastic waste problem.

Instead, reducing the number of plastics, but increasing their quality and durability can better lend itself to a more <u>sustainable</u>, <u>reuse system</u>. Companies need to redesign their packaging and delivery systems to eliminate their use of these low-value and non-recyclable single use plastics, and invest in sustainable reuse and refill delivery systems. It is important to reiterate that the current plastic packaging and delivery system only appears cheaper to companies because they have been able to <u>externalise a major part of the life cycle costs of their products</u>. It is time for these companies to internalise the true cost of their production and invest in sustainable systems.



MULTI-LAYERED PLASTICS AND THE GREENWASHING OF FALSE SOLUTIONS

Every year, "Other" plastics, marked with the number 7, including multi-layered plastics, sachets, cigarette butts, personal care product tubes make up the largest share of plastic waste, and this year was no different. Multi-layered plastics, as the name suggests, are typically composed of multiple layers of different types of plastic, sometimes along with metal or paper. Recycling this material is particularly challenging as it requires the layers to be separated from each other, which is currently not possible at a



Multi-layered plastic (MLP) in Brand Audit Image: SWaCH, Pune

commercial scale. The light weight and high volume of these packets also make them expensive to sort, aggregate and transport. The material is so heterogenous that the output quality is notoriously difficult to control — which means that even after recycling, this would not fetch much value. For all these reasons, multi–layered plastics remain commercially non-recyclable.

Multi-layered plastics remain commercially non-recyclable.

The current uses of multi-layered plastics are limited to environmentally undesirable processes such as incineration, pyrolysis and downcycling applications such as plastic to road. Even for these applications, multi-layered plastics do not generate much market value — cement plants and other processors even charge tipping fees to accept these plastics.

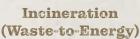
Despite this, the quantum of multi-layered plastics has only increased over the last few years as corporates have flooded the market with non-commercially recyclable single use packaging to push their products to a larger consumer base. Most of these sachets, which are predominantly used for food packaging, go from packaging to waste within minutes of being purchased by consumers. Of the 1,49,985 pieces audited in India this year, 35% was multi-layered plastic.

The only sustainable long-term solution is to phase out the production of these multi-layered plastics. In recent years, corporates have been working hard to greenwash their image by legitimising incineration, chemical recycling, and bioplastics as a solution to multi-layered plastics. Nowhere have these been shown to work sustainably at scale with post-consumer waste.

FALSE SOLUTIONS









Pyrolysis



Compostable Bioplastic



Chemical Recycling

Incineration (waste-to-energy, plastic-to-fuel) processes not only release 3 tonnes of CO2 for every tonne of plastic processed, but also emit cancer-causing and immune-system disrupting chemicals, heavy metals and particulate matter into the air. Chemical recycling (pyrolysis, gasification) is the process of chemically breaking down polymers into monomers, and then using the monomers to create new polymers (plastics). Assessments of the environmental impact and commercial viability of chemical recycling post-consumer waste at scale are notoriously misleading, and their true impact is as yet, unknown. Legitimisation of these processes will give plastic producers a license to continue the indiscriminate production of non-recyclable and low value plastics, which will have long-term negative environmental and health impacts. In the worst case, these processes will be commercially unviable for exclusively treating low value plastics and will lead to a diversion of good quality, recyclable plastics away from recycling just to keep these processes afloat.

Bioplastics do contain some amount of non-fossil fuel material as input, though this is often less than 50%. Since they are a mixture of fossil-fuel based and plant-based plastics, they need to be disposed of just like fossil-fuel based plastic. From a plastic waste point of view, bioplastics are no better than regular plastic. Compostable plastics do degrade under certain temperature and pressure conditions, but require a specialised facility and cannot easily be composted along with organic waste. Introducing compostable plastics into a geography without the technology and capacity to compost these plastics, is no different than introducing non-recyclable plastics. There is little that separates these plastics from fossil-fuel based plastics, apart from their eco-friendly names.

In the absence of legislation that deters these processes, they will continue to harm the environment and give producers a license to continue introducing more plastics into the environment. Strong legislation should deter environmentally undesirable processes, encourage the use of recycled plastics over virgin plastics and mandate a complete phase out of plastics which cannot be recycled at scale.



RECOGNISING WASTE PICKERS

Waste pickers are essential workers who collect and sort waste for recycling and form the base of India's recycling sector. For decades, they have worked informally, at very low costs and with very slim margins. It is due to their efficiency and resilience that India boasts of a recycling rate as high as 60%. Waste pickers must be recognised as an integral part of the waste management system. Extended Producer Responsibility (EPR) policy provides a unique opportunity to build the capacity of the informal recycling sector, quantify its contribution and add-on materials that are currently unviable to recycle.

In most parts of the country, materials like PET, HDPE and PP are already efficiently recycled by the informal sector. EPR interventions for such materials should be limited to supporting formalisation and capacity building of the informal sector to maintain and report data on waste handled. In absence of legislation that prioritises inclusion, there is a real danger that corporate investment will divert these materials away from the informal sector. Setting up new, centralised private collection streams for these materials may be simpler for corporates but it will come at the cost of livelihoods of all the waste pickers and informal recycling sector actors who will be unable to survive without these viable materials.

When designed inclusively, EPR can be used to create market value for non-viable plastics and channel waste through the existing informal sector. Since 2019, ITC Ltd has worked directly with the waste pickers of SWaCH in Pune to support the collection of multilayered plastics, demonstrating the viability of inclusive EPR. In this model, the brand owner supports the purchase of multi-layered plastic directly from waste pickers at a mutually agreed minimum per kilogram rate and covers the viability gap of the system. This system works directly with waste pickers and informal sector actors like scrap dealers and is designed to strengthen the existing system, rather than bypass it. Through this system over 1000MT of multi-layered and low value plastics have been collected, adding roughly Rs. 600 to each waste pickers' monthly income.

Recycling is a critical piece of the puzzle in dealing with the plastics that are already in the system, and recognising the contribution of waste pickers is essential. But

not all plastics in the system are recyclable, and so recycling cannot be the whole solution. Simply put: What cannot be recycled or reused should not be produced.



CONCLUSION AND RECOMMENDATIONS

The indiscriminate production of plastics, particularly single use and non-recyclable plastics needs to be stopped. Consumers in India, particularly the youth, are aware of the unsustainability of single-use plastics and are willing to switch to more sustainable products. However, a challenge cited by most consumers is that sustainable alternatives for many products are simply not available. Zero Waste and sustainable brands are gaining popularity, and large, fast-moving consumer goods conglomerates like Unilever, Nestle, Coca-Cola, PepsiCo, ITC Ltd. and more have made voluntary international or national sustainability commitments. However, these commitments need to be examined to ensure that they are real, lasting solutions and not merely distractions from the root of the problem.

A transition away from the use-and-throw economy will entail an overhaul not only of the packaging and production lines, but likely of distribution channels as well. This will be expensive, and therefore comes with a major first-mover disadvantage for companies. Strong government regulation can remedy this, by making sustainability mandatory, and not merely a marketing strategy for companies. Well-designed regulation on plastics should achieve the following:

Elimination of non-recyclable plastics

All non-recyclable plastics should be phased out. This includes eliminating those plastics which have no end-use apart from incineration, waste-to-energy, chemical recycling, plastic-to-road, etc. Given the physical properties of this plastic, picking, sorting and transporting each and every piece of single-use multi-layered plastic produced will be impossible. What's worse is that processing targets and 'plastic neutrality' distract from the issue of plastic production, and instead provide a license to continue production, while increasing the dependency on unproven, expensive, energy-intensive and environmentally undesirable forms of end-of-life processing.

Investment in reuse and refill systems

Eliminating single-use plastics needs to go hand-in-hand with designing packing that is reusable and delivery systems that allow for refill and reuse. Current packaging and distribution systems are designed around the properties (long shelf-life, temperature resistance) afforded by non-recyclable and difficult-to-recycle plastics. Unless companies invest in sustainable packaging and delivery, we will continue to find plastics polluting our streets and water bodies.

Recognise and incorporate informal waste pickers into EPR-based recycling systems

India has a robust, informal recycling economy that has been contributing to solid waste management and internalising the waste management costs of corporations for decades. Today, this sector faces an existential threat due to the growing interest of companies to divert waste out of the informal economy and into new, private waste management systems. Without government–mandated inclusion of informal sector waste pickers, there is a risk that corporates will divert investment into centralised, capital–intensive waste management facilities, and cut–off access to waste for informal waste pickers. The informal sector does not have the resources to compete with corporate power and money. Yet, strong government regulation provides an opportunity to formalise and build the capacity of this sector, and strengthen it to handle currently unviable materials.

There should be waste picker representation in planning, decision making and oversight bodies on EPR to ensure that the informal sector is duly recognised. In a given geography, an EPR plan should include the mapping and inclusion plan for the informal recycling chain. The cost of EPR should cover the true cost of picking, sorting, storing and transporting waste, including fair compensation for labour time. Due to the unequal distribution of power between the industry and the informal sector, there is a risk that these costs will be determined by industry. Requirements on registration, data management, traceability, taxation and formalisation should be made keeping in mind the structure and capacity of the existing informal sector actors. Finally, waste picker integration should not be a nice—to—have, but a mandatory part of any EPR system.

Reduce the use of virgin plastic, use recycled plastic

The problem of plastic pollution begins with the extraction of oil to produce virgin plastic. For recyclable plastics like PET, HDPE, PP, and LDPE there should be a mandated increase in the use of recycled plastics in single-layered plastic products and packaging. The dependence on virgin plastics should be reduced, especially in a country with a large recycling economy. Increasing the demand for locally recycled plastics, will create market incentives to further increase the level of recycling through the existing recycling channels.

Most importantly, regulation on each of these aspects needs to be measurable and enforceable and have strict penalties in case of non-compliance.

Companies like Coca-Cola, PepsiCo, Nestle and Unilever not only feature prominently in India's plastic, but are found to be Global Top Plastic Polluters year after year. It is no longer acceptable for companies to profit off pollution. Voluntary, Corporate-Social-Responsibility driven sustainability initiatives, coupled with large marketing budgets do well for the greenwashing of brands, but they fall short in addressing the problem. Reducing the use of single-use plastics, phasing out non-recycled plastics and designing sustainable packaging and delivery systems are the only long-term solutions to the plastic crisis.

The proverbial bathtub is overflowing, and we cannot empty it with a teaspoon. We need to turn off the tap.















